

Title (en)  
Concentration of water-ketone composition.

Title (de)  
Aufkonzentrierung eines Wasser-Keton-Gemischs.

Title (fr)  
Concentration d'une composition eau-cétone.

Publication  
**EP 0381477 B1 19940928 (EN)**

Application  
**EP 90301015 A 19900131**

Priority  
US 30469189 A 19890201

Abstract (en)  
[origin: US4935144A] Water is separated from methyl isobutyl ketone by pervaporation across a polyvinyl alcohol membrane.

IPC 1-7  
**B01D 61/36**; **B01D 71/82**

IPC 8 full level  
**B01D 61/36** (2006.01); **B01D 69/12** (2006.01); **B01D 71/38** (2006.01); **C07C 29/76** (2006.01); **C07C 45/78** (2006.01); **C07C 49/04** (2006.01)

CPC (source: EP US)  
**B01D 61/362** (2013.01 - EP US); **B01D 69/125** (2013.01 - EP US); **B01D 71/38** (2013.01 - EP); **B01D 71/381** (2022.08 - US); **B01D 71/383** (2022.08 - US); **C07C 29/76** (2013.01 - EP US); **C07C 45/786** (2013.01 - EP US)

Citation (examination)  
CHEMICAL ABSTRACTS, vol. 95, no. 8, 24 August 1981, Columbus, Ohio, US; S.Peter et al.: "Chemically resistant asymmetric membranes made from PVA for the separation of organic solvents and phenols from aqueous solutions", p. 343 & ACS SYM SER 1981, 154 SYN MEM 2, 281-91

Cited by  
DE4024517C1; EP0499728A1; EP0496090A3; US7604746B2; WO2009130245A1; WO2011154925A1; EP2226192A1; US8747752B2; US9090766B2; EP2226341A2; US9067035B2; EP2226116A2; US8366811B2; US8540806B2; US8764888B2

Designated contracting state (EPC)  
DE FR GB NL

DOCDB simple family (publication)  
**US 4935144 A 19900619**; CA 2003676 A1 19900801; DE 69012847 D1 19941103; DE 69012847 T2 19950202; EP 0381477 A2 19900808; EP 0381477 A3 19910605; EP 0381477 B1 19940928; JP H02261521 A 19901024

DOCDB simple family (application)  
**US 30469189 A 19890201**; CA 2003676 A 19891123; DE 69012847 T 19900131; EP 90301015 A 19900131; JP 2052090 A 19900201